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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,224	07/27/2001	Wing Foon Lee	509702000100	6824
25227	7590	06/15/2004	EXAMINER	
MORRISON & FOERSTER LLP 1650 TYSONS BOULEVARD SUITE 300 MCLEAN, VA 22102			CUNNINGHAM, TERRY D	
			ART UNIT	PAPER NUMBER
			2816	

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/916,224

Applicant(s)

LEE ET AL.

OK

Examiner

Terry D. Cunningham

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 10, 11, 24 and 25 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-17 and 26 is/are allowed.
- 6) ☒ Claim(s) 1-9, 12-14, 18-23, 27 and 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### **DETAILED ACTION**

It is initially noted that the amendments to claims 10, 11, 24 and 25 are not understood because these claims are removed from consideration. Further, the amendment improperly marks the amendments. For example, with the markings for claim 12, it would appear that prior claim 12 had no claim body.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4, 5, 12-14, 18, 19, 21, 27 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 4, the phrase “to substantially null and cancel the charge injection and clock feed-through charges” is not understood. It is not understood or seen possible how this operation can occur without any additionally recited elements. As understood by one skilled in the art, the recited structure would not generally have such operation.

Claim 5 is rejected for the reasons discussed above with claim 4.

In claims 12, lines 2-3, it is not understood how the step “switching a first switching element to off” can cause “a charge injection charges and feed-through charges to flow into a first node”, without any additional steps. As would be understood by one skilled in the art, this step alone would not be able to provide the recited operation. Similar indefiniteness exists in lines 4-7.

In claim 13, it is not understood how a “method” can comprise essentially circuitry. Insofar as understood this claim would have similar indefiniteness as claim 4 and/or claim 12.

Claim 14 is rejected as including the indefiniteness discussed above with claim 13.

Claims 18 and 19 are rejected for similar reasons as claims 4 and 5.

Claims 21, 27 and 28 are rejected for similar reasons as claims 4 and 5.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9, 12-14 and 27-28 are rejected under 35 U.S.C. §102(b) as being anticipated by Hirano et al. (USPN 5, 694,445). Hirano et al. disclose, in Figs. 1 and 6, “a first switching element (ST2) coupled to a first terminal (N10) and a second terminal (N13)”; “a second switching element (ST1) coupled to the first terminal”; and “a capacitor coupled between the second switching element and a ground (ground) or reference voltage”; “a first clock signal (ST2 of Fig. 6)”; and “a second clock signal (ST1 of Fig. 6), all connected and operating similarly as recited by Applicant.

Examiner has fully considered Applicant’s remarks for the above rejection and has not found them to be persuasive. Nowhere is Applicant discussing any specific claim language purported to be lacking in the reference to Hirano et al. Applicant argues concerning the connections in the reference to Hirano et al., however, these remarks are not at all understood. As elaborated for in the rejection above, the circuit of Hirano et al. precisely meets that recited in the claims. Applicant further remarks that the claims recite “only 1 capacitor and 2 switching elements”. However, these remarks are not understood nor is it seen how such can be relevant. There is nothing whatsoever in the claim limiting the circuit to including “only 1 capacitor and 2

switching elements”. Examiner initially points out that the claims expressly state what the circuits or methods are “comprising”. It has been well established that the term “comprising” allows for other elements. Additionally, Examiner is reading the recited “circuit” as being only the recited elements, not necessarily the entire circuits shown in the figures.

Applicant further discusses “non-overlapping clock signals” and “memory-cell-array operation”. However, neither of these features are found to be recited in the claims. Thus, such cannot possibly be of relevance. Examiner, however, points out the signals ST1 and ST2 of Fig. 6 are clearly “non-overlapping” since there are never on at the same time.

Since Applicant has not shown any failings in the reference to f et al., the rejection is hereby maintained.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terry Cunningham whose telephone number is 571-272-1742.

The examiner can normally be reached on Monday-Thursday from 7:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TC  
June 14, 2004

  
Terry D. Cunningham  
Primary Examiner  
Art Unit 2816